

## CLAIMS

1. A rotary electric machine having a fixed stator, and a rotor rotated by electromagnetic energy from the stator, wherein the rotor has in its radially outer region a magnetic pole-carrying face, a stepwise drawn portion concentric with the face, and a cylindrical shaft portion, on the rotational axis of the rotor, formed in its radially inner region, the shaft portion or the stepwise drawn portion being formed with a face perpendicular to the rotational axis.
2. The rotary electric machine as set forth in claim 1, wherein a space for a one-way clutch to be housed is formed by the stepwise drawn portion.
3. The rotary electric machine as set forth in claim 1 or 2, wherein the magnetic pole-carrying face, the stepwise drawn portion and the shaft portion are formed integral with each other.
4. The rotary electric machine as set forth in any of claims 1-3, wherein a female thread is formed in the perpendicular face.
5. The rotary electric machine as set forth in claim 4, wherein the female thread is formed on the rotational axis.
6. The rotary electric machine as set forth in claim 4, wherein the female thread is formed in a plurality around the rotational axis at regular intervals.